## **AMENDMENT IN THE CLAIMS:**

Kindly amend the claims, without prejudice, without admission, without surrender of subject matter, and without any intention of creating any estoppel as to equivalents, to read as follows:

- 1. (Currently amended) A transgenic mouse model showing hypomyelinosis of the thalamus that can be a cause of Nasu-Hakola disease, and showing a neuropsychiatric disorder caused by the hypomyelinosis, wherein the transgenic mouse comprises a homozygous disruption in chromosomal DAP12 (DNAX Activation Protein 12) gene function, and wherein the homozygous disruption includes the promoter region and exons 1, 2, and 3.
  - 2. (Canceled)
- 3. (Currently amended) The transgenic mouse model of claim 1, wherein the homozygous disruption in DAP12 can be pheonotypically exhibited as a myelinogenesis developmental disorder or a neuropsychiatric disorder associated with disruption in DAP12 genefunction that can be a cause of Nasu-Hakola disease.
- 4.(Currently amended) The transgenic mouse model of claim [[3]] 1, wherein the neuropsychiatric disorder <u>caused by hypomyelinosis</u> is selected from the group consisting of Nasu-Hakola disease <u>caused by hypomyelinosis</u>, dementia <u>associated with disruption in DAP12</u> gene function <u>caused by hypomyelinosis</u>, schizophrenia <u>associated with disruption in DAP12</u> gene function <u>caused by hypomyelinosis</u>, schizotypal personality disorders <u>associated with disruption in DAP12</u> gene function <u>caused by hypomyelinosis</u>, obsessive-compulsive disorders <u>associated with disruption in DAP12</u> gene function <u>caused by hypomyelinosis</u>, or Tourette's syndrome <u>associated with disruption in DAP12</u> gene function <u>caused by hypomyelinosis</u>.
- 5. (Currently amended) The transgenic mouse model of claim [[3]] 1, wherein the neuropsychiatric disorder <u>caused by hypomyelinosis</u> is Nasu-Hakola disease <u>caused by hypomyelinosis</u> or dementia <u>associated with disruption in DAP12 gene function caused by hypomyelinosis</u>.
  - 6-18. (Canceled)
- 19. (Previously presented) The transgenic mouse model of claim 1, wherein the expression of myelin basic protein in the brain is weak in regions where DAP12 is strongly expressed in wild-type mice.

20. (Previously presented) The transgenic mouse model of claim 1, wherein the transgenic mouse exhibits an impairment in sensorimotor gating as compared to wild-type mice.